

CLAIMS:

- 1        1. A method of manufacturing a polymer-dispersed liquid crystal cell, in which  
2 method a mixture, which predominantly comprises a liquid crystalline material as well as reactive  
3 monomers and a photoinitiator, is sandwiched between two substrates, which are provided with an  
4 electrode layer, whereafter the mixture is polymerized under the influence of radiation,  
5 characterized in that the mixture comprises two types of non-volatile, reactive monomers, the first  
6 type of monomer being readily miscible with the liquid crystalline material and the second type of  
7 monomer being poorly miscible with said liquid crystalline material.
- 1        2. A method as claimed in Claim 1, characterized in that the first type of monomer is  
2 an ethoxylated alkyl-phenolacrylate whose alkyl group comprises at least five C-atoms, and in that  
3 the second type of monomer is an alkylacrylate whose alkyl group comprises at least 8 and  
4 maximally 18 C-atoms.
- 1        3. A method as claimed in Claim 1, characterized in that the quantity of each of the  
2 two types of monomers is at least 20% by weight, calculated with respect to the overall quantity of  
3 both types of monomers.
- 1        4. A method as claimed in Claim 1, characterized in that the mixture is introduced into  
2 the cell under the influence of a reduced pressure.
- 1        5. A polymerizable mixture which can suitably be used in a polymer-dispersed liquid  
2 crystal cell, which mixture comprises reactive monomers and a photoinitiator, characterized in that  
3 the mixture contains two types of non-volatile reactive monomers, the first type of monomer being  
4 readily miscible with a liquid crystalline material and the second type of monomer being poorly  
5 miscible with said liquid crystalline material.

1       6.           A polymerizable mixture as claimed in Claim 5, characterized in that the first type  
2       of monomer is an ethoxylated alkyl-phenolacrylate whose alkyl group comprises at least five C-  
3       atoms, and in that the second type of monomer is an alkylacrylate whose alkyl group comprises at  
4       least 8 and maximally 18 C-atoms.

1       7.           A polymerizable mixture as claimed in Claim 5, characterized in that the quantity  
2       of each of the two types of monomers is at least 20% by weight, calculated with respect to the  
3       overall quantity of both types of monomers.

1       8.           A polymerizable mixture as claimed in Claim 5, characterized in that a quantity of  
2       70-90% by weight of a liquid crystalline material is added to the mixture.

1       9.           A display device comprising a polymer-dispersed liquid crystal cell with a matrix of  
2       individually drivable rows and columns of electrodes as well as means for driving these electrodes,  
characterized in that a cell manufactured in accordance with the method claimed in Claim 1 is used  
in said display device.